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I. AMENDMENT TO CLAIMS

1-19. (Cancelled)

20. (Previously Presented) An isolated nucleic acid comprising a nucleotide sequence selected from the group consisting of:

- (a) the nucleotide sequence as set forth in SEQ ID NO: 1;
- (b) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 2;
- (c) a nucleotide sequence fully complementary to (a) or (b).

21. (Canceled)

22. (Previously Presented) An isolated nucleic acid encoding a polypeptide comprising an amino acid sequence that is 95% identical to the amino acid sequence of SEQ ID NO: 2, wherein said polypeptide has O-succinylbenzoic acid CoA ligase activity.

23. (Previously Presented) An isolated nucleic acid that encodes a polypeptide that has O-succinylbenzoic acid CoA ligase activity and hybridizes to the complement of the nucleic acid of claim 20 under the following stringent conditions: a final wash in 0.1X SSC at 68°C.

24. (Previously Presented) A vector comprising the nucleic acid of claim 20 or 23.

25. (Previously Presented) The vector of claim 24, wherein said vector is an expression vector.

26. (Previously Presented) The vector of claim 25 that is an integration vector pCR.lmenEint, having

- (a) an fragment of SEQ ID NO: 1 encoding a polypeptide that has O-succinylbenzoic acid CoA ligase activity; and
- (b) a restriction map as set forth in Fig. 1.

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27. (Previously Presented) The vector of claim 26 wherein the vector has been deposited in the *E. coli* strain Top10/pCR2.1menEint under accession no. DSM 14080.

28. (Previously Presented) A host cell comprising the vector of claim 25.

29. (Previously Presented) The host cell of claim 28 that is a prokaryotic cell.

30. (Previously Presented) An isolated nucleic acid consisting of SEQ ID NO: 1 or a fragment thereof and encoding a polypeptide that has O-succinylbenzoic acid CoA ligase activity.

31. (Previously Presented) An isolated nucleic acid consisting of a fragment of at least 40 consecutive nucleotides of SEQ ID NO:1 or the full complement thereof, wherein said isolated nucleic acid is a probe in a hybridization reaction to detect an isolated nucleic acid that is at least 90% identical to that of SEQ ID NO: 1 and encodes a polypeptide that has O-succinylbenzoic acid CoA ligase activity and wherein said hybridization reaction comprise the following stringent conditions: a final wash in 0.1X SSC at 68°C.

32. (Previously Presented) The isolated nucleic acid of claim 31, wherein said fragment is a primer or probe.

33. (Previously Presented) A vector comprising the nucleic acid of claim 30.

34. (Previously Presented) The vector of claim 33, wherein said vector is an expression vector.

35. (Previously Presented) A host cell comprising the vector of claim 33.

36. (Previously Presented) The host cell of claim 35 that is a prokaryotic cell.

37. (Currently Amended) A vector comprising the nucleic acid of ~~claims 21 or claim~~
22.

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38. (Previously Presented) The vector of claim 37, wherein said vector is an expression vector.

39. (Previously Presented) A host cell comprising the vector of claim 37.

40. (Previously Presented) The host cell of claim 39 that is a prokaryotic cell.

41. (Previously Presented) A vector comprising the nucleic acid of claim 31.

42. (Previously Presented) The vector of claim 41, wherein said vector is an expression vector.

43. (Previously Presented) A host cell comprising the vector of claim 41.

44. (Previously Presented) The host cell of claim 43 that is a prokaryotic cell.